

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A method for the verification of anti-jamming in a communications system ~~comprising having~~ several sensors or adaptive antennas, comprising at least the following steps :

[[*]] estimating [[the]] ~~a~~ mean power π_y^* of the output of the communications system,

[[*]] estimating [[the]] ~~a~~ respective power values P_u or $P'u$, of a station u, the antenna noise P_a or $P'a$, the thermal noise P_T , or $P'T$,

[[*]] estimating at least one of the following ratios :

$$J_{tot}/S_{tot} = \left(\sum_{p=1}^P ; P_p \right) / \left(\sum_{u=1}^U ; P_u \right)$$

[[(22)]]

with p = the jamming unit

= sum of the power values of the residual jamming units/sum of the power values of the stations on the reception band B[[.]]

$$J_{tot}/S_u = \left(\sum_{p=1}^P ; P_p \right) / P_u$$

[[(23)]]

= sum of the power values of the residual jamming units/power of the station u in the reception band B.

$$J_u / S_u = \left(\sum_{p=1}^P P_{pu} \right) / P_u$$

[[(24)]]

[[W]]with P_{pu} = power of the jamming unit p in the reception band B_u .

- comparing at least one of the three ratios with a threshold value.

2. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising at least one a step for estimating the mean power π_y^\wedge , for an output from a number K of samples, $y(k)$, $1 \leq k \leq K$ of this output of this output, given by

$$\pi_y^\wedge = \Delta \frac{1}{K} \sum_{k=1}^K |y(k)|^2$$

[[(25)]]

3. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising a step of estimation P_u^\wedge, P'_u^\wedge of the power P_u, P'_u in using, firstly, a priori a priori knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2, w$ and G for an analog application of the filters and secondly the estimation of the parameters π_u and S_u .

4. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1 comprising an estimation P_u^\wedge, P'_u^\wedge of the power P_u, P'_u in using, firstly, a priori a priori knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2, w$ and G for an analog application of the filters and secondly the estimation of the parameter η_a .

5. (currently amended): [[A]] The method for the verification of anti-jamming according to claim 1, comprising a step of estimation $P; \hat{u}, P; \hat{u}'$ of the power P_u, P'_u in using a-priori a-priori knowledge of the parameters w and G_{num} for a digital application of the adaptive filters and $|\alpha|^2, w$ and G for an analog application of the filters and secondly the estimation of the parameter η_T .

6. (currently amended): [[A]] The method for the verification of anti-jamming according to ~~one of the~~ claim[[s]] 1, 2, 3, 4 and 5 comprising a step of estimation $J; \hat{tot} / S; \hat{tot}$, of the ratio J_{tot}/S_{tot} given by

$$J; \hat{tot} / S; \hat{tot} = (\pi; \hat{y} - \sum_{u=1}^U P; \hat{u} - P; \hat{a} - P; \hat{T}) / (\sum_{u=1}^U P; \hat{u})$$

(26)

7. (currently amended): [[A]] The method for the verification of anti-jamming according to ~~one of the~~ claim[[s]] 1, 2, 3, 4 and 5 comprising a step of estimation $J; \hat{tot} / S; \hat{u}$, of the ratio J_{tot}/S_u , given by

$$J; \hat{tot} / S; \hat{u} = (\pi; \hat{y} - \sum_{u=1}^U P; \hat{u} - P; \hat{a} - P; \hat{T}) / P; \hat{u}$$

(27)

8. (currently amended): [[A]] The method of verification of anti-jamming according to [[the]] claim[[s]] 1, 2, 3, 4 and 5 comprising a step of estimation $J; \hat{u} / S; \hat{u}$, of the ratio J/S_u in using the total power of residual jamming units in the B_u band of the working station u given by

$$J; \hat{^{\wedge}} / S; \hat{^{\wedge}}_u = (\pi; \hat{^{\wedge}}_{yu} - P; \hat{^{\wedge}}_u - \sum_{v \neq u} (P; \hat{^{\wedge}}_{vu} - P; \hat{^{\wedge}}_{au} - P; \hat{^{\wedge}}_{Tu}) / P; \hat{^{\wedge}}$$

(28)

9. (currently amended): A method of verification of anti-jamming according to ~~one of the claim[[s]] 1 to 8~~ comprising a step of determination of the precision of estimation, and wherein this value is used to set the threshold.

10. (currently amended): A system for the verification of anti-jamming in a communications system comprising several sensors or adaptive antennas, a ground station and a piloting device, comprising at least the following elements: for a verification by channel, from the ground and for a reception band B, a computer integrated into the piloting device and an onboard computer, the two computers being programmed to execute the following steps :

Communications Channel Power Measurement: Onboard function ~~parametrized parameterized~~ from the ground by the *Onboard Param VAA* *Onboard Param Vaa* function,

VAA Gain: Ground function,

Communications channel power measurement : onboard function, *VAA Processing VAA* *Processing* : *Ground function*.

11. (currently amended): A system for the verification of anti-jamming in a communications system comprising several sensors or adaptive antennas, a ground station and a piloting device, comprising at least the following elements :

for a verification by station, an onboard computer and a ground computer, the computers being programmed to execute the following functions :

Communications Channel Power Measurement : onboard function ~~parametrized parameterized~~ from the ground by the *Onboard Param VAA* *Onboard Param Vaa* function,

VAA Gain: ground function,

Aquisition of Communications Channel : onboard function ~~parametrized parameterized~~ from the ground by the *Onboard Param VAA* *Onboard Param Vaa* function,

VAA Processing : ground function.

12. (currently amended): A use of the method according to claim 1 ~~, or of the system according to one of the claims 10 and 11 to a space communications system.~~

13. (new): A use of the system according to claim 10 [[to]] for a space communications system.

14. (new): A use of the system according to claim 11 [[to]] for a space communications system.